

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.-11. (Canceled)

12. (Previously presented) A method for inhibiting expression of a protein by a large circular single-stranded nucleic acid molecule targeted to an RNA encoding the protein comprising contacting a cell expressing the protein with a composition comprising:

(i) a large circular single-stranded nucleic acid molecule comprising at least one target gene-specific antisense region, wherein said large circular single-stranded nucleic acid molecule is effective for reducing expression of said gene, wherein said molecule comprises a recombinant bacteriophage or phagemid genome; and

(ii) a transfection effective carrier thereof comprising a lipid.

13. (Previously presented) The method according to claim 12, wherein expression of said target protein causes cell proliferation or cancer.

14. (Previously presented) The method according to claim 13, wherein said cancer is leukemia, lung cancer, liver cancer, colon cancer, stomach cancer, pancreatic cancer, brain cancer or prostate malignancy.

15. (Previously presented) The method according to claim 14, wherein said cancer is leukemia, cervical cancer, or breast cancer.

16. (Previously presented) The method according to claim 13, wherein said target protein is tumor necrosis factor, nuclear factor, MYB, MYC, RAS, or cell division kinase.

17. (Previously presented) The method according to claim 12, wherein said protein is a viral protein.

18. (Previously presented) The method according to claim 17, wherein said virus is herpes, human papilloma virus (HPV), HIV, small pox, mononucleosis (Epstein-Barr virus), hepatitis, or respiratory syncytial virus (RSV).

19. (Previously presented) The method according to claim 12, wherein expression of said target protein causes a metabolic disease or an immunological disorder.

20.-23. (Canceled)

24. (Previously presented) A method for inhibiting expression of a plurality of proteins comprising contacting a cell expressing the proteins with a composition comprising:

(i) a large circular single-stranded nucleic acid molecule comprising at least one target gene-specific antisense region, wherein said large circular single-stranded nucleic acid molecule is effective for reducing expression of said gene, wherein said molecule comprises a recombinant bacteriophage or phagemid genome; and

(ii) a transfection effective carrier thereof comprising a lipid.

25. (Previously presented) A method for inhibiting cell proliferation, comprising, administering to said cell a composition comprising:

(i) a large circular single-stranded nucleic acid molecule comprising at least one target gene-specific antisense region, wherein said large circular single-stranded nucleic acid molecule is effective for reducing expression of said gene, wherein said molecule is at least about 3,000 nucleotides long; and

(ii) a transfection effective carrier thereof comprising a lipid, in which inhibiting expression of a target gene or genes inhibits cell proliferation.

26.-30. (Canceled)

31. (Previously presented) The method according to claim 25, wherein the antisense region of the molecule is at least about 50 nucleotides long.
32. (Previously presented) The method according to claim 25, wherein the antisense region is complementary to an entire gene sequence.
33. (Previously presented) The method according to claim 25, wherein the nucleic acid molecule is a single stranded recombinant bacteriophage or phagemid genome.
34. (Previously presented) The method according to claim 33, wherein said bacteriophage or phagemid is a filamentous phage.
35. (Previously presented) The method according to claim 34, wherein the filamentous phage is phage M13.
36. (Canceled)
37. (Previously presented) The method according to claim 12, wherein the antisense region of the molecule is at least about 50 nucleotides long.
38. (Previously presented) The method according to claim 12, wherein the antisense region is complementary to an entire gene sequence.
39. (Previously presented) The method according to claim 12, wherein the molecule is at least about 3,000 nucleotides long.
40. (Previously presented) A method for inhibiting expression of a protein by a large circular single-stranded nucleic acid molecule targeted to an RNA encoding the selected protein comprising contacting a cell expressing the protein with a composition comprising:
- (i) a large circular single-stranded nucleic acid molecule comprising at least one target gene-specific antisense region, wherein said large circular single-stranded nucleic acid molecule

is effective for reducing expression of said gene, wherein said molecule is at least about 3,000 nucleotides long; and

(ii) a transfection effective carrier thereof comprising a lipid.

41.-45. (Canceled)

46. (Previously presented) The method according to claim 25, wherein the lipid is a liposome.

47. (Previously presented) The method according to claim 12, wherein the lipid is a liposome.

48.-49. (Canceled)

50. (Previously presented) The method according to claim 25, wherein the lipid is a cationic lipid.

51. (Previously presented) The method according to claim 12, wherein the lipid is a cationic lipid.

52.-61. (Canceled)

62. (Previously presented) The method according to claim 25, wherein the nucleic acid is DNA.

63. (Previously presented) The method according to claim 12, wherein the nucleic acid is DNA.

64. (Previously presented) The method according to claim 12, wherein the contacting of the cell with the composition occurs *in vitro*.

65. (Previously presented) The method according to claim 24, wherein the contacting of the cell with the composition occurs *in vitro*.

66. (Previously presented) The method according to claim 25, wherein the inhibiting of cell proliferation occurs *in vitro*.

67. (Previously presented) The method according to claim 40, wherein the contacting of the cell with the composition occurs *in vitro*.